



Ergonomic Injuries in Maryland

Prepared for Rep. Elijah E. Cummings

**Minority Staff
Special Investigations Division
Committee on Government Reform
U.S. House of Representatives**

March 20, 2001

Table of Contents

Executive Summary	i
I. Introduction	1
II. Objective of the Report	3
III. Methodology	3
IV. Findings	4
A. The Number and Severity of Ergonomic Injuries in Maryland	4
B. The Cost of Ergonomic Injuries in Maryland	5
V. Conclusion	6

EXECUTIVE SUMMARY

Ergonomic injuries, such as back problems, tendonitis, sprains and strains, and carpal tunnel syndrome, are a serious and expensive workplace problem affecting the health of hundreds of thousands of workers and costing the U.S. economy billions of dollars annually. In 1998, almost six hundred thousand workers suffered ergonomic injuries that were so severe that they were forced to take time off of work.

Ergonomic injuries account for one-third of all occupational injuries and illnesses and constitute the single largest job-related injury and illness problem in the United States. The National Academy of Sciences has estimated that the costs of ergonomic injuries to employees, employers, and society as a whole can be conservatively estimated at \$50 billion annually.

The U.S. Department of Labor has worked for a decade to develop regulations to prevent ergonomic injuries. These regulations were finalized in November 2000. However, Congress is now considering repealing these regulations using the Congressional Review Act, a special legislative maneuver that has never been used before.

In order to estimate the impact of a repeal of the ergonomics rule on Maryland workers and on the state's economy, Rep. Elijah E. Cummings requested that the Special Investigations Division of the minority staff of the Committee on Government Reform conduct a study of ergonomic injuries in the state. This report, which is based on data obtained from the Bureau of Labor Statistics (BLS) and cost estimates prepared by the National Academy of Sciences, presents the results of the investigation.

The report finds that:

- **Thousands of Maryland workers suffer from ergonomic injuries.** In 1998, 9,706 Maryland workers suffered ergonomic injuries that were so severe that they were forced to miss at least one day of work. Ergonomic injuries accounted for almost one-third of all occupational injuries that occurred in Maryland
- **Many of these ergonomic injuries are severe, causing workers to miss significant time away from work.** Of the 9,706 ergonomic injuries that caused workers to miss time at work, 1,382, or 14%, caused workers to miss more than a month of work. Over 40% of the injuries were so severe that they caused workers to miss more than one week of work.
- **Ergonomic injuries cost Maryland's economy almost one billion dollars each year.** The analysis estimates that the total statewide cost of ergonomic injuries, including lost wages and lost economic productivity, was approximately \$800 million in 1998.

I. INTRODUCTION

Ergonomic injuries, such as back problems, tendonitis, sprains and strains, and carpal tunnel syndrome, are a serious and expensive workplace problem affecting the health of hundreds of thousands of workers and costing the U.S. economy billions of dollars annually. In 1998, almost six hundred thousand workers suffered ergonomic injuries that were so severe that they were forced to take time off of work.¹ Ergonomic injuries account for one-third of all occupational injuries and illnesses and constitute the single largest job-related injury and illness problem in the United States.² These injuries are painful and debilitating. Ergonomic injuries can permanently disable workers, not only reducing their ability to perform their job, but preventing them from handling even simple tasks like combing their hair, typing, or picking up a baby.

These injuries are also expensive. Employees lose wages because of these injuries, while employers are forced to pay billions in compensation and face high costs because of the loss of productivity from the injuries. The National Academy of Sciences has estimated that the costs of ergonomic injuries to employees, employers, and society as a whole can be conservatively estimated at \$50 billion annually.³

Both Republican and Democratic administrations have been concerned about ergonomic injuries for over a decade. In 1990, Elizabeth Dole, Secretary of Labor for President George H.W. Bush, found that ergonomic injuries were “one of the nation’s most debilitating across-the-board worker safety and health issues” and announced that the Bush Administration was “committed to taking the most effective steps necessary to address the problem of ergonomic hazards.”⁴ In June of 1992, President Bush’s Labor Department began work to establish regulations to solve the problem of ergonomic injuries.

Under President Clinton, the Department of Labor continued to investigate the causes and potential solutions to ergonomic injuries. Last year the Department held nine weeks of hearings with more than one thousand witnesses. It sponsored 11 best practices conferences and allowed for nearly nine months of written comment from the public. It examined extensive scientific research, including a 1998 National Academy of Sciences study that found that ergonomic injuries can be caused by work and that workplace interventions can reduce the number and severity of

¹Bureau of Labor Statistics, U.S. Department of Labor (Mar. 6, 2001).

²U.S. Department of Labor, *Ergonomics Final Rule*, 65 Fed. Reg. 68,262, 68,262 (2000).

³National Research Council/Institute of Medicine, *Musculoskeletal Disorders and the Workplace: Low Back and Upper Extremities*, ES-5 (2001).

⁴U.S. Department of Labor, *Secretary Dole Announces Ergonomics Guidelines to Protect Workers From Repetitive Motion Illnesses/Carpal Tunnel Syndrome*, 1 (Aug. 30, 1990).

these injuries.⁵ Finally, on the basis of this evidence, the Department concluded that ergonomic standards would reduce the number and severity of ergonomic injuries.

On November 14, 2000, the Department issued the final standards to reduce the occurrence of ergonomic injuries. Beginning in October of this year, covered employers must provide their employees with information about ergonomic injuries, how to recognize and report them, and a brief description of the new ergonomic standard. The employer is not required to take any additional steps unless an employee reports an ergonomic injury or persistent signs of one. If an employee reports an ergonomic injury or persistent symptoms, and the employee is exposed to ergonomic hazards, the employer must then take action to address the problem. This action could range from a “quick fix,” if the injury is isolated, to implementation of a full ergonomics program.⁶

The standards cover over six million employers and over 100 million workers. OSHA estimates that compliance will cost \$4.5 billion annually, but that the standards will save approximately \$9.1 billion annually and prevent roughly 4.6 million injuries over the next ten years.⁷

Congress is now considering overturning these regulations using a special legislative maneuver, the Congressional Review Act (CRA), which has never been used before. The CRA, enacted in 1996 as part of the Republican *Contract with America*, allows Congress to repeal rules promulgated by executive agencies. The CRA also allows Congress to by-pass many procedural requirements and repeal rules with very little debate.⁸

On March 1, 2001, Senator Don Nickles (R-OK) invoked the CRA and introduced S.J. Res. 6, which disapproves the recently enacted ergonomics rule. If both the House and the Senate pass the legislation to overturn the regulation, and the President does not veto it, the ergonomics rule will be repealed. The Labor Department would then be permanently prevented from issuing any ergonomics rule that is “substantially the same” as the disapproved rule.⁹

⁵*Ergonomics Final Rule*, *supra* note 2, at 68,263.

⁶*Id.* at 68,846-854 (to be codified at Subpart W of 29 C.F.R. Part 1910).

⁷*Ergonomics Final Rule*, *supra* note 2, at 68,262.

⁸5 U.S.C. § 802.

⁹5 U.S.C. § 801(b)(2). Under the CRA, OSHA would be allowed to promulgate a similar rule only if Congress “specifically authorized” the rule by law. *Id.*

II. OBJECTIVE OF THE REPORT

This report was requested by Rep. Cummings to estimate the incidence of ergonomic injuries in Maryland. While there have been analyses of the numbers of workers affected and the cost of ergonomic injuries at the national level, there have been few estimates of the extent of the problem at the state level. This report is the first congressional study to estimate the number of ergonomic injuries in Maryland, as well as the first to estimate the costs of these injuries.

III. METHODOLOGY

This analysis presents an estimate of the number of ergonomic injuries in Maryland, and an estimate of their cost. The data on the number ergonomic injuries was obtained upon request from the Bureau of Labor Statistics (BLS). BLS conducts extensive surveys of 220,000 private employers in 41 states, and produces state and national estimates of the total number of workplace injuries and illnesses based on these survey results. The data obtained from BLS includes information on all musculoskeletal disorders -- such as sprains and strains, back injuries, and carpal tunnel syndrome -- that caused employees to miss at least one day of work. In addition to obtaining information on the total number of musculoskeletal injuries, the minority staff also requested and obtained more detailed data on the types and severity of injuries, the industries in which they occur, and the workers who are affected.

The report also estimates the cost of ergonomic injuries in Maryland. In order to estimate these costs in Maryland, the report relies upon the recent estimate by the National Academy of Sciences of the nationwide economic costs of ergonomic injuries.¹⁰ The economic costs estimated by the National Academy of Sciences include medical costs, lost wages, and lost productivity. In order to determine a statewide share of these costs, the report calculates the proportion of all U.S. ergonomic injuries that occur in Maryland. The report then uses this proportion to estimate the total economic costs in Maryland.

The cost figures in this analysis are estimates and are based upon several assumptions about the cost of treating ergonomic injuries and the lost wages and productivity due to these injuries. However, because the BLS data significantly underestimate the total number of injuries, it is likely that these estimates are significantly below the true cost of ergonomic injuries. According to the National Academy of Sciences, “there is substantial reason to think that a significant proportion of musculoskeletal disorders that might be attributable to work are never reported as such.”¹¹ For example, a study in Connecticut found that only 10% of workers who suffered from work-related ergonomic injuries had filed workers’ compensation claims,

¹⁰*Musculoskeletal Disorders and the Workplace: Low Back and Upper Extremities*, supra note 3, at ES-5.

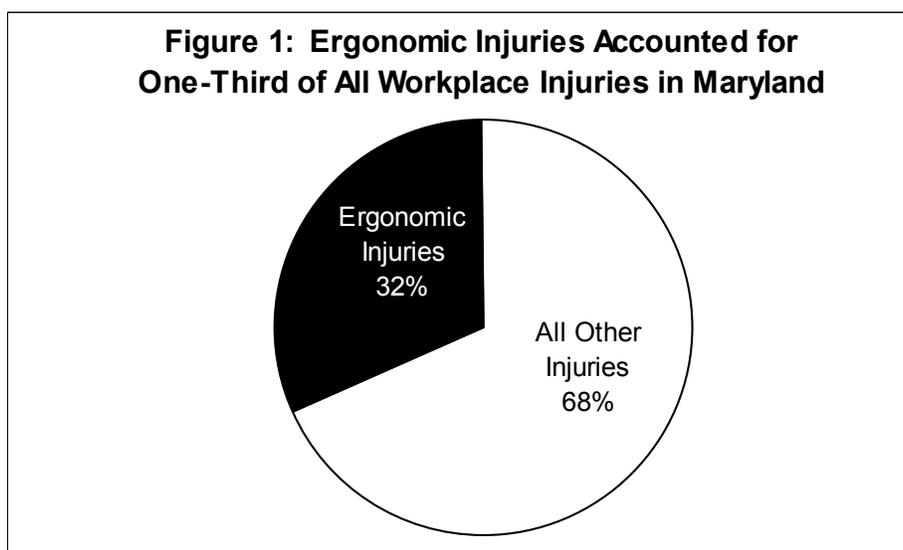
¹¹*Musculoskeletal Disorders and the Workplace: Low Back and Upper Extremities*, supra note 3, at 2-12.

suggesting a high level of underreporting.¹²

IV. FINDINGS

A. The Number and Severity of Ergonomic Injuries in Maryland

The Bureau of Labor statistics indicate that ergonomic injuries are a severe problem in the state of Maryland. The data show that in 1998, 9,706 workers suffered ergonomic injuries that were so severe that they were forced to miss at least one day of work. Ergonomic injuries accounted for almost one-third of all occupational injuries that occurred in Maryland in 1998 (Figure 1).



Many of these ergonomic injuries are severe, causing workers to miss significant time away from work. Of the 9,706 ergonomic injuries that caused workers to miss time at work, 1,382, or 14%, caused workers to miss more than a month of work. Over 40% of the injuries were so severe that they caused workers to miss more than one week of work. These extended absences cause financial hardships for employees and increase costs for their employers.

Workers in some industries are at higher risk of ergonomic injuries than workers in others. Overall, workers in the services sector suffered the most injuries (3,149), followed by workers in retail trade (1,774), and those in manufacturing (1,272). Among industry divisions, the transportation and public utilities industry had the highest incidence rate of ergonomic injuries,

¹²Morse, et. al., *The Economic and Social Consequences of Work-Related Musculoskeletal Disorders*, *International Journal of Occupational and Environmental Health*, 4 (4), 209-216 (Oct. - Dec. 1998).

100 per 10,000 workers.

B. The Cost of Ergonomic Injuries in Maryland

Ergonomic injuries cost Maryland's economy millions of dollars each year. In 1998, workers' compensation insurance paid injured workers in Maryland \$510 million.¹³ The BLS data show that ergonomic injuries accounted for 32% of all workplace injuries in Maryland that year. If workers with ergonomic injuries received a proportionate share of the payments from workers' compensation, the cost of workers compensation payments for Maryland workers that suffered ergonomic injuries in 1998 would be approximately \$160 million.

Workers' compensation payments are only a part of the total economic cost of ergonomic injuries, however. Employers and employees must not only pay for medical treatment, but lose millions of dollars in lost wages and lost economic productivity. Overall, the National Academy of Sciences estimates that the total cost of ergonomic injuries to the U.S. economy is approximately \$50 billion annually. In 1998, Maryland's private industry workers suffered 9,706 ergonomic injuries, which is 1.6% of all ergonomic injuries that occurred in the United States. If the state of Maryland bears a proportionate share of the nationwide economic costs of ergonomic injuries, this would mean that total costs due to ergonomic injuries in Maryland in 1998 were approximately \$800 million.

V. CONCLUSION

This analysis finds that ergonomic injuries present a severe health problem for Maryland's workers and a significant economic cost statewide. Almost 10,000 Maryland workers suffered ergonomic injuries that forced them to miss work in 1998. These injuries were often serious, with over 40% of the injuries causing workers to miss more than a week of work. The total cost of ergonomic injuries to employers and employees in Maryland in 1998 was approximately \$800 million.

¹³National Academy of Social Insurance, *Workers Compensation: Benefits, Coverage, and Costs, 1997-1998 New Estimates* (2001).